REMARKS

Claims 2 and 9-23 are now pending in the present application. Claims 2-14 have been amended and claims 15-23 have been added. Claims 13-15 are independent. The specification has been amended. Reconsideration of this application, as amended, is respectfully requested.

Rejections Under 35 U.S.C. § 103

Claims 1, 5 and 14 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Becker, USPN 4,558,996 and in further view of Lepak, USPN 3,644,068 referenced by Tsukada, USPN 4,969,808. Claims 7 and 11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Becker, as modified by Lepak referenced by Tsukada as applied to claims 1 and 5, and further in view of Ohira et al., JP 60088885. Claims 1, 3 and 13 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Beller et al., U.S. Application Publication No. 2002/0001527 and further in view of Lepak, referenced by Tsukada. Claim 9 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Beller et al., as modified by Lepak referenced by Tsukada, as applied to claim 3, and further in view of Ohira et al. Claims 2, 4 and 13 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Beller et al., as modified by Lepak and Tsukada, as applied to claim 1, and further in view of Knapp et al., USPN 5,387,088 and Suzuki et al., USPN 5,929,589 Claims 2, 6 and 14 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Becker, as modified by Lepak and Tsukada as applied to claim 1, and further in view of Knapp et al. and Suzuki et al. Claims 8 and 12 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Becker as, as modified by Lepak, Tsukada, Knapp and Suzuki et al., as applied to claims 2 and 6, and further in view of Ohira et al. Claim 10 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Beller et al., as modified

by Lepak, Tsukada, Knapp and Suzuki et al., as applied to claim 4, and further view of Ohira et al. These rejections are respectfully traversed.

The present invention is directed to a roller pump. Independent claims 13, 14 and 15 recite a combination of elements including the recitation "wherein said pump housing and said reduction gear case are formed from a single, one-piece member." Applicants respectfully submit that the references relied on by the Examiner fail to teach or suggest the present invention as recited in independent claims 13, 14 and 15.

In the Examiner's Advisory Action dated July 12, 2005, the Examiner has taken the position that the recitation "single, one-piece member" is taught by the combination of Becker/Beller et al., Lepak and Tsukada, since this recitation is synonymous with the term "integral." Applicants completely disagree with the Examiner's position. As recognized by the Examiner, the term "integral" has been held in *In re Larson*, 144 USPQ 347 (CCPA 1965) to cover several parts rigidly secured together as a single unit. Applicants do not refute this position of the Examiner. However, the term integral is not synonymous with the recitation "single, one-piece member." If something is made up of a single, one-piece member, it cannot be made up of several pieces. If this were not the case, it would be impossible to ever differentiate between something that is formed from a single member and something that is formed from several members.

In view of the above, the Examiner's position is improper and should be withdrawn. With regard to the Examiner's reliance on *In re Larson* and *In re Fridolph*, 50 CCPA 745, 89 F.2d 509, 135 USPQ 319 (1962), Applicants submit that the Examiner has not established a *prima facie* case of obviousness. In order to establish a *prima facie* case of obviousness, the

Examiner must provide a suggestion in the prior art of the desirability of doing what the inventors have done. In the present situation, the Examiner has merely relied on two decisions of the CCPA, and has not provided any rationale with regard to why such a modification would be obvious in the present situation. In view of this, the Examiner's rejection is improper for this additional reason.

Although Applicants do not completely agree with the Examiner's position, in order to expedite prosecution, independent claim 1 has been canceled and dependent claims 3, 5 and 7 have been presented in independent form (pending independent claims 13-15). Applicants respectfully submit that independent claims 13-15 define the present invention over the references relied on by the Examiner.

Independent claim 13 is directed to a roller pump, wherein a combination of elements is recited including the recitation "wherein a part of said inner surface of said pump housing is composed of a semicircle of which center coincides with the center of said drive shaft, another part of said inner surface is composed of a partial circle of which center is shifted from the center of said drive shaft, and of which the length of radius is equal to that of said semicircle, each of end portions of said semicircle and each of end portions of said partial circle are connected by each of tangential lines extending from each of said end portions of said semicircle toward each of said end portions of said partial circle respectively, said partial circle is made to be a form suitable to be connected to an inlet slot for attaching an inlet portion of said elastic tube, and to an outlet slot for attaching an outlet portion of said elastic tube."

Independent claim 14 is directed to a roller pump, wherein a combination of elements is recited including the recitation "wherein a part of said inner surface of said pump housing is

composed of a semicircle, a center of which coincides with the center of said drive shaft, another part of said inner surface is composed of a partial circle of which center is shifted from the center of said drive shaft, and of which the length of radius is longer than that of said semicircle, each of end portions of said semicircle and each of end portions of said partial circle are connected respectively, said partial circle is made to be a form suitable to be connected to an inlet slot for attaching an inlet portion of said elastic tube, and to an outlet slot for attaching an outlet portion of said elastic tube."

Independent claim 15 is directed to a roller pump, wherein a combination of elements is recited including the recitation "wherein an inlet slot into which an inlet portion of said elastic tube is inserted to attach said inlet portion to said pump housing is provided, said inlet slot is provided with a lever for pressing said inlet portion into said inlet slot to hold said inlet portion in said inlet slot, said lever being rotated perpendicularly to the axis of said elastic tube by a spring force to press said inlet portion of said elastic tube, an upper end portion of said lever is tilted relative to the vertical axis, said inlet portion is attached to said pump housing being pushed downward through a place between said upper end portion and said inlet slot, and an outlet slot into which an outlet portion of said elastic tube is inserted to attach said outlet portion to said pump housing is provided, said outlet slot is provided with a lever for pressing said outlet portion into said outlet slot to hold said outlet portion in said outlet slot, said lever being rotated perpendicularly to the axis of said elastic tube by a spring force to press said outlet portion of said elastic tube, an upper end portion of said lever is tilted relative to the vertical axis, said outlet portion is attached to said pump housing being pushed downward through a place between said upper end portion and said outlet slot."

In the Examiner's final Office Action, the Examiner rejects the subject matter of independent claim 13 in view of the combination of Beller et al, Lepak and Tsukada. The Examiner also rejects the subject matter of independent claim 14 in view of the combination of Becker, Lepak and Tsukada. Finally, the Examiner rejects dependent claim 7 (now independent claim 15) in view of the combination of Becker, Lepak, Tsukada and Ohira et al. Applicants submit that the Examiner's rejections are improper and should be withdrawn. The following comments will be directed with regard to these rejections by the Examiner.

Referring to the Becker and Beller et al. references, these references disclose roller pumps that include a pump housing. The Examiner recognizes that the Becker and Beller et al. references fail to disclose a driver driving the drive shaft through a reduction gear as recited in the independent claims of the present invention. However, the Examiner relies on the Lepak and Tsukada references to respectively modify the Becker and Beller et al. references to arrive at the present invention.

While not commenting on the appropriateness of the Examiner's modifications, Applicants respectfully submit that even if the Becker and Beller et al. references were modified in the manner suggested by the Examiner, the combination of references would not arrive at the present invention as recited in independent claims 13-15.

The Examiner asserts that Beller et al. discloses the shape of the inner surface 3 as recited in independent claim 13. However, referring to FIG. 4 of Beller et al., the support means 11 appears to be formed of a circular housing, which does not include a "partial circle of which center is shifted from the center of said drive shaft" as recited in independent 13. In view of this,

independent claim 13 defines the present invention over the combination of Beller et al., Lepak and Tsukada.

With regard to independent claim 14, the Examiner asserts that Becker discloses the shape of the inner surface 3 as recited in this claim. Referring to FIG. 6 of Becker, the ramp 63 is not a "partial circle" as recited in independent claim 14. The ramp 63 appears to be a flat surface that extends from the curved inside surface 62. At column 11, lines 32-37 of Becker, it is described that the ramps 63 provide "an opportunity to have over some minimum radius most adjacent the inlet and outlet orifice 18 and 20 a greater radium (here 1.844") so that the resilient collapsible tube is only occluded through a predetermined space." However, this portion of Becker does not indicate that the ramp 63 is a curved surface and therefore cannot be considered a "partial circle" as recited in independent claim 14 of the present application. In view of this, independent claim 14 defines the present invention over the combination of Becker, Lepak and Tsukada.

With regard to independent claim 15 (previously dependent claim 7), the Examiner relies on the additional reference to Ohira et al. However, Ohira et al. discloses levers 9 that are biased toward the open position by the springs 7. In view of this, Ohira et al. fails to disclose "said lever being rotated perpendicularly to the axis of said elastic tube by a spring force to press said inlet portion (or outlet portion) of said elastic tube" as recited in independent claim 15. In view of this, independent claim 15 defines the present invention over the combination of Beller et al., Lepak, Tsukada and Ohira et al.

With regard to dependent claims 2, 9-12 and 16-23, Applicants respectfully submit that these claims are allowable due to their respective dependence upon allowable independent claims 13-15, as well as due to the additional recitations in these claims.

In view of the above amendments and remarks, Applicants respectfully submit that claims 2 and 9-23 clearly define the present invention over the references relied on by the Examiner. Accordingly, reconsideration and withdrawal of the Examiner's rejections under 35 U.S.C. § 103 are respectfully requested.

CONCLUSION

All the stated grounds of rejection have been properly traversed and/or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently pending rejections and that they be withdrawn.

It is believed that a full and complete response has been made to the Office Action, and that as such, the Examiner is respectfully requested to send the application to Issue.

In the event there are any matters remaining in this application, the Examiner is invited to contact Paul C. Lewis, Registration No. 43,368 at (703) 205-8000 in the Washington, D.C. area.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

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Respectfully submitted,

By _____

Paul C. Lewis
Registration No.: 43,368
BIRCH, STEWART, KOLASCH & BIRCH, LLP
8110 Gatehouse Rd.
Suite 100 East
P.O. Box 747
Falls Church, Virginia 22040-0747
(703) 205-8000
Attorney for Applicant